

Policy, Research, and External Affairs

WORKING PAPERS

Education and Employment

Population and Human Resources
Department
The World Bank
May 1991
WPS 686

Lending for Learning

Twenty Years of World Bank Support for Basic Education

Adriaan Verspoor

Two decades of World Bank lending for education teach that flexibility, community involvement, and adaptation of programs to local conditions are some of the critical elements of successful education programs.

This paper — a product of the Education and Employment Division, Population, Health, and Human Resources Department — is part of a larger effort in PRE to analyze in detail the lessons of the Bank's operational experience in education. Copies are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Cynthia Cristobal, room S6-214, extension 33640 (42 pages, with figures and tables).

Verspoor traces the development of the World Bank's lending policies for education and draws lessons and recommendations from the Bank's experience.

The evolution of the Bank's policies for education lending has paralleled the evolution of priorities in the development community. When the Bank began lending for education in 1963, it concentrated on training manpower for the modern sector and limited Bank lending to general secondary education, vocational and technical education, higher education, and teacher training. As contribution of basic education to development was more widely recognized in the late 1960s, the Bank began to support primary education. And as alleviating poverty and promoting equity became priorities, the Bank began in the 1970s to expand its support for basic education — primary and nonformal education to help build up literacy, numeracy, and problem-solving skills.

The Bank's lending for primary education has supported four main objectives: expanding educational opportunities, improving instructional quality, increasing efficiency, and strengthening management in the sector. In nonformal education, Bank lending has supported the goals of developing practical skills, promoting basic literacy, and building income-generating skills.

Verspoor argues that Bank support to education has been most successful when it provides for in-depth analysis of subsectoral issues, concentrates on a few objectives, sustains its commitment to these objectives over a long period, and delegates to the borrowing country the responsibility for sectoral analysis, policy formulation, and project development and implementation.

From his review of Bank experience in supporting basic education, Verspoor draws four lessons for those who design educational development programs:

- The most important determinant of the outcome of primary education programs is the quality of the implementation at the school level.
- The quality of the implementation depends on its context — and what works in one place many not in another. Programs must be adapted to each location.
- Effective administration and efficient management are vital preconditions for good implementation.
- The lack of support for mechanisms to assess the outcomes of the Bank's basic education programs is the critical weakness in their design.

Verspoor makes five principal recommendations for designing education projects:

- Support the locally determined processes that drive educational development, such as school improvement, community mobilization, and the planning of schools' locations.
- Invest in the most cost-effective inputs.
- Test carefully how an investment package works in a particular setting and monitor outcomes constantly.
- Strengthen the institutional capacity for national and regional strategic planning and management, and for operation at the district and school levels.
- Design projects to allow a flexible response to a wide variety of local needs and unplanned events.

The PRE Working Paper Series disseminates the findings of work under way in the Bank's Policy, Research, and External Affairs Complex. An objective of the series is to get these findings out quickly, even if presentations are less than fully polished. The findings, interpretations, and conclusions in these papers do not necessarily represent official Bank policy.

TABLE OF CONTENTS

	Page
I. EVOLUTION OF THE WORLD BANK'S LENDING POLICY	1
II. PRIMARY EDUCATION: INVESTMENT OBJECTIVES, STRATEGIES, AND LESSONS	8
III. NONFORMAL EDUCATION AND TRAINING: INVESTMENT OBJECTIVES, STRATEGIES, AND LESSONS	26
IV. CONCLUSIONS AND IMPLICATIONS	32

Tables

Table 1: World Bank Lending for Primary Education and Non-formal Basic Education FY70-90	3
Table 2: World Bank Lending for Primary Education and Non-formal Basic Education by Region, FY70-90	6
Table 3: Number of World Bank Primary Education and Non-formal Basic Education Projects FY70-90	6
Table 4: Projected World Bank Lending for Primary and Non-formal Basic Education FY91-93	7
Table 5: Dilemmas of Large-Scale Programs	33

Figures

Figure 1: Composition of World Bank Lending for General Education, FY63-90	5
Figure 2: A Summary Chart of the World Bank's Primary Education Investment Objectives and Strategies	23
Figure 3: A Summary Chart of the World Bank's Nonformal Education and Training Investment Objectives and Strategies	31

Boxes

	Page
Box 1: Increasing Girls Participation in School	12
Box 2: Multi-grade Teaching in Colombia and Double-Shift System in Senegal	17
Box 3: Research Components and Information Provision: EDURURAL in North East Brazil	18
Box 4: Measuring Educational Outcomes: Achievement Testing in the Philippines	21
Box 5: Learning and Earning: Nonformal Education in Indonesia and Yemen Arab Republic	29
Box 6: The Provision of Funds in Response to Local Requests in Colombia	35
Box 7: Evolution in the World Bank's Approach to Lending for Primary Education: The Malaysia Case	38
Box 8: Broadening Loans to the Education Sector: Mali and Bangladesh Sector Loans	39
 References	 41

Acknowledgements

This paper was prepared for the Workshop on Basic Education at the National Institute of Educational Planning and Administration in New Delhi, India, November 6-9, 1990. A team of PHREE staff helped me develop the paper. Kin Bing Wu provided extensive editorial assistance; Rosemary Rinaldi, Omporn Regel and Alastair Rodd prepared the tables and the boxes. Cynthia Cristobal's Word Perfect skills are to be credited for the presentation.

2. EVOLUTION OF THE WORLD BANK'S LENDING POLICY

As a development institution, the World Bank supports education by providing financial resources, technical assistance, and policy advice. It contributed US\$11.2 billion to support education and training through 396 projects in 100 countries between 1963 and 1990. The volume of Bank¹ lending for basic education² totalled US\$2 billion since 1970, and accounted for over a quarter of the world's multilateral aid to primary education between FY81-86.³ The Bank employs more than 100 education professionals to assist Borrowers with the development and implementation of the education loans and to appraise more than 20 education projects per year. It also has a small division of 10 professional staff to undertake educational research and policy work. This paper will review the evolution of the Bank's lending policy, and the objectives, strategies and lessons of lending for basic education, which includes both primary and nonformal education.⁴

The Bank's policy of lending for education has gone through several phases over the past two decades. At the time of its inception, the World Bank was authorized under its Articles of Agreement (1945) to provide investment capital to support projects "for productive purposes, including...the encouragement of the development of productive facilities and resources in less developed countries."⁵ In the 1950s, few development economists recognized the critical contribution of education to productivity and economic growth. In that decade, education was not considered a suitable object for Bank investment.

Entry into Education Lending

In FY63, the World Bank began lending for education, stimulated by the emerging view in development economics of education as an investment in human capital, and by the growing demand for financial assistance in education from its member-states. Initially, the objectives were to promote educational planning, build infrastructures, such as schools, and attract additional capital investment from other donor agencies.

¹ The word "Bank" used in this paper refers to the World Bank.

² Basic education includes primary education for children and literacy and basic skills training for youths and adults. It does not include formal vocational training.

³ The World Bank's fiscal year starts on July 1st. FY81-86 refers to the period from July 1, 1980 to June 30, 1986.

⁴ The discussion in this chapter is based on the following World Bank papers: 1971 Sector Working Paper; 1974 Sector Working Paper; Education Sector Policy Paper; Review of Bank Operations in the Education Sector; The Dividends of Learning; and Primary Education: A World Bank Policy Paper.

⁵ World Bank, "Review of Bank Operations in the Education Sector," p. 1.

From FY63-71, lending was concentrated on strengthening what were considered the "productive" subsectors of education--general secondary education, vocational and technical education, higher education, and teacher training. The principal objective was to train manpower to support the modern sector, the expansion of which was seen as the key to development. The World Bank, as well as other international agencies, considered that basic education with its high local cost content was not very suitable for external assistance, and that external funding was best directed towards the higher levels of education.

Between FY63-71, the Bank's lending to secondary education accounted for 71.8%, post-secondary education for 13.0%, university for 10%, adult training for 4.1%, and primary education for 1.1% of total education lending.⁶ Early Bank lending did not support nonformal education, defined as learning that is not part of a country's regular school system, although it covered nonformal vocational training.

Emergence of a Sector Policy

The critical contribution of basic education to development was gradually recognized in the second half of the 1960s. Some of the requests to the Bank for educational financing (South Korea, for example) included primary education as a priority area. In 1968, Unesco requested that the Bank support primary education, and that it consider loan applications on the basis of "the assessed needs and priorities of a recipient country."⁷ In response, the Bank began, starting in 1970, to support primary education projects which aimed to improve efficiency and relevance of instruction. It also supported the provision of basic equipment, supplies and textbooks, and the establishment of facilities for the local production of textbooks and other teaching materials. In 1971, the Bank issued for the first time a formal statement on the priority for education lending in a "Sector Working Paper."

Anticipating the resource implications of the increasing demand for schooling exacerbated by the rapid growth of school-age population, the Sector Working Paper emphasized the needs to find new sources of educational financing, improve efficiency in delivery through the use of educational radio, television, programmed learning and other instructional materials, and search for less costly alternatives to formal primary schooling, including nonformal education.

Emphasis on Meeting Basic Needs

Meanwhile, the population explosion and the deterioration of the living conditions for the world's poor forced the development community to re-think its priorities and strategies. In 1973, Bank President Robert McNamara called for a major policy shift in international development assistance toward meeting the basic needs of the world's poorest people for food, shelter, clothing, clean water, health care and education. This new emphasis on equity and on the

⁶ World Bank, "1971 Sector Working Paper," Table 5, p. 32.

⁷ Romain, "Lending in Primary Education: Bank Performance Review, 1962-83," p. v.

alleviation of poverty, led to the formulation of a more comprehensive sector policy in education. The new focus gave impetus to lending for primary and nonformal education to help build the foundation of literacy, numeracy and problem-solving skills necessary for national development.

The "1974 Sector Working Paper" updated the 1971 paper and reiterated the importance of meeting the educational needs of the lowest 40% of the income group. The paper emphasized the urgency of improving access of the rural and urban poor to education, making curricula relevant to rural needs, promoting functional adult literacy, and making increased use of the mother tongue. The paper stressed that rural education and training should be practical, designed as an integral part of the education system, linked with rural development activities, and replicable in terms of cost and management. The paper also called for research into the conditions related to basic education, curriculum development, teacher training, institutional models, project design, use of the mass media, management training, administrative reorganization, monitoring and evaluation, and planning and policy formulation by countries. Furthermore, the Paper urged the Bank to support the local design, production and distribution of textbooks and instructional materials.

As a result, Bank lending to primary education increased from 5% between FY70-74 to 14% between FY75-79 (See Table 1). Support for nonformal education rose from nil before FY69 to 5.2% of the total education project cost between FY74-79.⁸ Much of the financing for basic education was for the expansion of the enrollment capacity, such as school building and pre-service teacher training.

Table 1: World Bank Lending for Primary Education and Nonformal Basic Education
FY70-90

(US\$million)

FY	Total (\$)	Primary Education (\$)	Nonformal Basic Education (\$)	Primary Education as % of Total Bank Lending for Education (%)	Non-formal Basic Education as % of Total Bank Lending for Education (%)
70-74 *	814.9	36.4	n.a.	5	n.a.
75-79 *	1,681.9	236.7	n.a.	14	n.a.
80-84	2,964.2	423.7	37.8	14	1.3
85-90	5,530.7	1,273.2	18.7	23	0.3
Total 70-90	10,991.7	1,975.0	56.5	18	0.5

* Data for primary education also include nonformal basic education.

⁸ Romain and Armstrong, "Review of World Bank Operations in Nonformal Education and Training."

Commitment to Primary Education

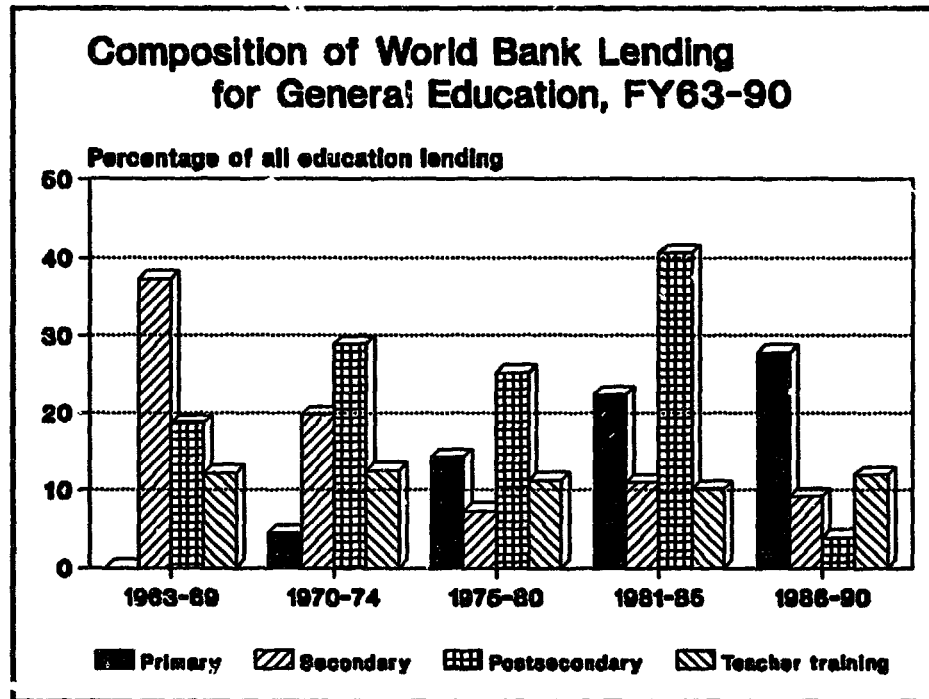
In the 1980s, the Bank's lending policy reflected the experience acquired earlier and a deepened understanding of the complexity of educational development. It gave a higher priority to primary education, and adopted a diversified approach to tackling the problems. The large and growing number of out-of-school children, the persistence of disparities between enrollments of boys and girls, the high repetition and dropout rates, the difficulty of replicating pilot projects, the problems of ruralizing the primary school curricula, and the mounting evidence on the importance of general primary education made significant rethinking in educational development strategies imperative.

The "1980 Sector Policy Paper" emphasized primary education as the foundation of educational development. It called for improving access of girls and rural children to basic education, a limitation of additional investments in secondary and higher education, enhancing instructional quality by providing cost-effective school inputs and teacher training, reducing internal inefficiency, mobilizing community resources and the mass media, and building local institutions. Recognizing that improving the institutional infrastructure is a pre-condition of effective primary education investment, the paper emphasized the strengthening of the leadership in educational management, planning and research, upon which depend well-designed policies and effective administration.

In sum, the stated objectives of Bank lending for primary education in the 1980s went beyond the expansion of enrollment capacity to include improving educational quality, increasing the efficiency of program delivery, and strengthening education sector management. Bank lending for primary education increased, during the 1980s, to 23% of its total educational lending between FY85-90 (See Table 1).

Lending for nonformal education varied from period to period (See Table 1). While the 1981 paper noted the growing number of illiterates, it did not consider that nonformal education represented a viable alternative to basic schooling, but underscored its importance in providing a second chance for those who missed formal schooling. The objectives of nonformal education and training emphasized by the Bank in that paper include practical skill development, basic literacy, and preparation for income generating activities. To date, approximately 11% of the 396 Bank-financed education projects have contained nonformal basic literacy components. Figure 1 shows the changes in the composition of Bank lending for education over the past three decades, reflecting the gradual broadening of lending objectives.

Figure 1



* Data do not include nonformal basic education and technical education.

In terms of the regional distribution of Bank lending for primary and nonformal education, the region of Europe, the Middle East, and North Africa (EMENA) has the largest share (42%) of lending amounts during FY85-90, mainly because of a large average size of loan (US\$44 million) rather than a large number of projects (See Table 2). Asia, with a smaller average project size of US\$21 million, accounted for 24% of the total number of primary education projects for the same period. Although Africa's share of 20% of total Bank lending for primary education remained stable during the 1980s, the region's primary education's share of total regional education lending has increased steadily from 20% in FY80-84 to over 33% in FY85-89. The number of primary projects in the region accounted for half of all primary projects financed during FY85-90.

Table 3 shows a gradual increase in all regions, except Latin America and the Caribbean (LAC), in the distribution of primary education projects over time.

Table 2: World Bank Lending for Primary Education and Nonformal Basic Education by Region, FY70-90

(US\$million)

FY	Africa		Asia		EMENA		LAC		Total		
	Primary Education	Nonformal Basic Education	Primary Education	Nonformal Basic Education	Primary Education	Non-formal Basic Education	Primary Education	Non-formal Basic Education	Primary Education	Non-formal Basic Education	
70-74 *	(\$)	1.1	n.a.	11.4	n.a.	14.6	n.a.	9.4	n.a.	36.5	n.a.
	(%)	3.0	0.0	31.2	0.0	40.0	0.0	25.8	0.0	100.0	0.0
75-79 *	(\$)	52.0	n.a.	69.0	n.a.	83.1	n.a.	32.6	n.a.	236.7	n.a.
	(%)	22.0	0.0	29.2	0.0	35.1	0.0	13.8	0.0	100.0	0.0
80-84	(\$)	100.5	3.4	151.2	32.1	42.0	2.3	130.0	0.0	423.7	37.8
	(%)	23.7	9.0	35.7	84.9	9.9	6.1	30.7	0.0	100.0	100.0
85-90	(\$)	249.5	0.0	340.9	0.0	532.9	0.0	154.9	0.0	1278.2	18.7
	(%)	19.5	0.0	26.7	0.0	41.7	0.0	12.1	0.0	100.0	100.0
Total	(\$)	403.1	3.4	572.5	32.1	672.6	2.3	326.9	0.0	1975.1	37.8

* Data for primary education also includes nonformal basic education.

Table 3: Number of World Bank Primary Education and Nonformal Basic Education Projects FY70-90

FY	Africa		Asia		EMENA		LAC		Total		
	Primary Education	Nonformal Basic Education	Primary Education	Nonformal Basic Education	Primary Education	Non-formal Basic Education	Primary Education	Non-formal Basic Education	Primary Education	Non-formal Basic Education	
70-74	(No.)	4	10	3	1	6	7	2	7	15	25
	(%)	6	26	11	11	20	33	8	29	10	27
75-79	(No.)	18	20	3	7	8	7	10	14	37	48
	(%)	26	53	11	78	20	33	40	58	24	52
80-84	(No.)	15	6	5	1	6	6	7	3	33	16
	(%)	21	16	19	11	20	29	28	13	22	18
85-90	(No.)	33	2	16	-	12	1	6	-	67	3
	(%)	47	5	59	0	40	5	24	0	44	3
Total 70-90		70	38	27	9	30	21	25	24	152	92
	(%)	100	100	100	100	100	100	100	100	100	100

Directions for the 1990s

In the 1990s, the Bank will continue to provide broad support for educational development with particular priority to six areas:

- Improving the effectiveness and efficiency of primary education;
- Increasing the access of women and girls to education;
- Strengthening science and technology education;
- Improving the efficiency and flexibility of training systems;
- Strengthening the contributions of higher education and science and technology institutions to development; and
- Continuing support for project-related training and the development of sectoral training capacity.

Support for basic education will thus continue to be an important part of Bank lending. Projections based on currently identified projects indicate that Bank lending for primary education will continue to be important over FY91-93, averaging 30% of total Bank education lending for all regions. However, so far, country requests for support of nonformal education continue to be low (see Table 4).

With these priorities in mind, the Bank will base its assistance on an analysis of the relationship between educational policies and the national economy, the feasibility of implementing educational reforms, and the capacity of national institutions to carry out educational policies. The Bank will also emphasize the relationship between education and training on one hand and employment policies and programs on the other.⁹

In the following chapters, the Bank's investment objectives and lessons learned from its assistance to primary and nonformal education and training will be discussed in detail.

Table 4: Projected World Bank Lending for Primary and Nonformal Basic Education
FY91-93

	Asia		Africa		EMENA		LAC		Total	
	\$	%	\$	%	\$	%	\$	%	\$	%
Primary	100	10	680	37	510	42	100	15	1390	30
Nonformal Basic	0	0	50	0	0	0	0	0	50	1

⁹ World Bank, "Dividends of Learning."

II. PRIMARY EDUCATION: INVESTMENT OBJECTIVES, STRATEGIES AND LESSONS

Lending for primary education¹⁰ has supported four categories of objectives and related educational inputs:

- expanding educational opportunities through school construction, provision of pre-service teacher training, and strengthening the demand for schooling by helping people overcome financial, cultural or religious barriers to participation;
- improving the quality of instruction through curriculum development (such as revision of syllabi, ruralization of the curriculum, and introduction of practical subjects), and instructional development (such as provision of textbooks, in-service teacher training, and distance education);
- increasing the efficiency of delivery by containing cost per pupil, manipulating student flows, and reallocating available resources; and
- strengthening education sector management by developing the institutional capacity for decision making, planning, and evaluation and research.

These strategies and lessons learned will be discussed below.

Objective 1: Expanding Educational Opportunities

Since the early 1970s, Bank primary education projects have provided strong support for the expansion of educational opportunities. Initially, this support focused mainly on the construction of school buildings. Between 1970 and 1980, the Bank provided financing for the supply of more than four million school places. In addition, extensive support has been provided for increasing the supply of qualified teachers. Finally, in recent years, considerable attention has been given to the need to address constraints on the demand for schooling, especially for girls.

School construction is a major part of educational investment. In some countries, the annualized capital cost represents 80% of the annual recurrent cost¹¹. From the outset, the Bank emphasized the need to adapt the school design to local resources, building traditions, and climate. Throughout the 1970s, Bank projects tested a wide range of low-cost methods for the building of durable and functional schools. In the main, three approaches have been tried, each with varying degrees of success.

¹⁰ This chapter draws heavily on Romain, "Lending in Primary Education."

¹¹ World Bank, "Education in Sub-Saharan Africa."

The first approach is designed to reduce school construction cost by using local materials and labor and by adapting local building designs to specific school requirements. Projects, many in West Africa, that adopted this approach were successful in reducing the direct cost of construction. However, many ran into significant implementation problems. The management problems and the cost associated with the training and supervision of workers on dispersed sites turned out to be insurmountable in many instances, especially where workers had to apply unfamiliar construction techniques, and where a public agency such as the Department of Public Works was responsible for managing the construction program. Few of these programs have, in fact, gone to scale.

The second approach sets out to reduce the cost of building through the use of prefabricated components. On-site assembly of prefabricated components has the potential to ensure uniform building standards and facilitates the use of durable materials. However, implementation difficulties in a number of countries have changed the perception of this approach as a low-cost alternative.

Three major problems emerged. First, transportation problems frequently occurred in delivery of building components, particularly in projects aimed at reaching previously under-served population in difficult to reach areas. The cost-saving advantages of mass produced prefabricated materials were offset by the increase in delivery costs. Second, synchronizing individual site preparation with component delivery frequently turned out to be a source of severe implementation problems. In addition, construction tasks such as site leveling, foundation preparation, and installation of water, sewage and electrical connections required professional supervision. Third, cost savings through the large-scale use of prefabricated materials depended on national capacities for the production of such components. Primary school building projects in Brazil, the Philippines, and Morocco would not have been possible without the national experience in the production of prefabricated components.

The third approach to school construction is to rely on voluntary community labor. From the perspectives of cost containment and local involvement, this approach has many advantages, but it is not without problems either. Self-help construction has rarely proceeded according to a centrally established calendar. This brings an element of unpredictability in the planning process. In addition, the scope for the application of unfamiliar construction techniques is usually limited, and there is little guarantee for durability and functionality of the buildings.

The experience of the Bank in school building thus demonstrates the limitations of large scale low-cost school construction programs. While the use of local community labor has considerable potential to bring down construction cost, it needs to be complemented by central support, including the training and supervision of workers in the use of building materials that are not locally available, in order to maintain momentum and ensure minimal standards. An important lesson is that the major problems are managerial and not technical.

Because of these problems, countries are well advised to use as much as possible existing schools and other buildings to reduce the need for new

construction. Many Bank projects have, therefore, supported the introduction of double shift-use of schools in densely populated urban areas and multi-grade teaching in rural areas. These programs have been successful where they have been well planned and included adequate training of teachers and supply of specially prepared teaching aids. A good example is the Escuela Nueva program in Colombia described under the section on increasing the efficiency of program delivery.

Pre-service teacher training is another key part of programs designed to expand educational opportunity. Between 1963 and 1984, Bank projects supported the creation of more than 90,000 places in 110 primary teacher colleges. Most of these projects supported existing national programs.

A review of Bank experience in teacher training¹² concluded that about one third of the projects had fully met their objectives, 20% did not meet them, and 10% met them only partially. One reason for the unsatisfactory outcome of some major projects was the neglect to adequately analyze the problems of teacher supply and demand. Teacher requirement projections rarely took into account regional and gender variations in the demand for teachers, or how competitive teachers' salaries are in comparison with other professions in attracting and retaining the better educated. Trade-offs between pre-service and in-service training were rarely analyzed. The possibility to limit pre-service teacher training to professional preparation (practical training) and to avoid duplication with general secondary education was analyzed only in a few instances.

In recent years, analyses of sector and projects have taken a broader view of teacher training. The emphasis has shifted away from the provision of hardware (buildings, furniture, equipment and specialized facilities) to the infusion of educational inputs (development of training curricula and instructional materials, training of trainers, and technical assistance). For example, between FY63 and FY84, 95% of teacher training components of completed projects supported the provision of hardware, but for the projects that were still under implementation at that time, the percentage dropped to 85%. At the same time, 62% of the completed components and 72% of the on-going ones included the provision of educational inputs. In FY89-90, 27 projects (over two thirds) of the 41 projects approved in that period had teacher training components. Twenty-three of these projects emphasized in-service training, most often coupled with curriculum revision and provision of new textbooks.

Teacher qualifications and levels of training are important issues governing the feasibility of educational expansion. Research shows that teachers must have a "bracket" of knowledge and skills in order to teach effectively. Traditionally, teachers who have had upper secondary education have the bracket of knowledge to teach primary school. Teachers with too little education and training cannot teach effectively, but those who have high academic qualifications may also have high aspirations which are not likely to be met by the existing incentives or the social prestige of the teaching profession. Job

¹² The discussion in this section draws heavily on the review by Haddad, "Teacher Training."

dissatisfaction may lead to low levels of performance and attrition. It is, therefore, important to carefully analyze the trade-offs between economic efficiency and educational effectiveness in the design of teacher training programs.

Several countries, for example, Burkina Faso and Senegal, have established teacher training programs that recruit lower secondary graduates for training as assistant teachers, with the understanding that, over a period of time, they will have the opportunity through effective performance and participation in in-service training programs to acquire higher qualifications. Pakistan and Bangladesh have established successful programs to recruit female assistant teachers who, with further in-service training and school-based professional support, have performed effectively in schools in their home community.

Strengthening the demand for education is the third strategy for expanding educational opportunities. This strategy often needs to complement investments in physical facilities. Special attention is needed to remove cultural, religious or financial barriers to participation, especially for girls.

Many countries have found that building schools is not enough to ensure that those who are not currently enrolled will attend school. In particular, providing access for girls does not guarantee their participation if parents do not appreciate the benefits of education sufficiently to be willing to bear the costs. Often parents must go against cultural or religious norms when sending their daughters to school. The direct and indirect costs to the family are often high: expenses for tuition and school supplies must be met and the loss of the valuable contributions made by daughters working at home and in the market place must be accepted.

Programs that are successful in increasing girls' participation have taken financial, cultural or religious factors into account. Interventions included such measures as increasing the number of female teachers to provide role models for girls and to ease parents' anxiety about the safety of girls away from the home; designing school calendars and facilities that take account of girls' economic contributions to the family; and promoting activities to broaden perceptions of the role of women in society.

A 1979 Pakistan primary education project tested two approaches to improving female teacher recruitment: (i) provision of rural residences for female teachers; and (ii) local recruitment of female "assistant teachers." Results showed that providing female teachers with residences did not contribute significantly to recruitment. Several socio-cultural factors restricted the success of this approach--single females do not live alone; they could not take their relatives with them; and night guards were not provided for their protection. However, the assistant teacher program was quite successful. Because they often came from the surrounding area, females hired for these positions were already known in the local community. This increased parents' confidence that their daughters would be safe at school. In addition, budget savings were possible because salaries were less for the assistant teachers with lower educational qualifications, and provision of female teacher residences was

not necessary. Recent projects include a provision for testing a wide range of cultural and other hindrance to female schooling. (See Box 1.)

Box 1: Increasing Girls' Participation in School

Three recent World Bank projects have been designed in response to concerns about girls' access to schooling. The *Gambia Education Sector Credit* was noted for being linked to a simultaneous *Women in Development Project*. The education program will increase girls' participation by lowering their school entry age (from 8 to 6 years old) to allow girls more time in school before puberty/marriage. Research will be conducted on the elimination of gender bias and stereotypes in curricula and textbooks. Increased enrollment of women in science and technology courses will be encouraged.

The *Bangladesh General Education Project* has a large program in basic education to attract and retain the rural poor, especially girls. The project includes a system of satellite schools with all-female staff to increase girls' participation. In addition, the project will finance development of pilot programs by non-government organizations (NGOs) and community groups such as:

- (a) nonformal primary programs that aim at under-served areas and older students with no previous opportunity for formal primary education; and
- (b) experimental programs to make government primary schools more attractive to the poor and girls through, for example, school feeding programs, provision of uniforms, teaching aids, and community outreach programs.

The *Pakistan Sindh Province Primary Education Development Project* includes experimental programs in selected districts. The innovations include changing the school calendar, instituting more flexible school hours, abolishing the school uniform requirement for rural children, providing free textbooks for rural girls, and initiating automatic promotion and achievement testing. A study will then be conducted on the impact of these measures on the enrollment, attendance, and retention of students, with a plan to introduce successful measures in all provincial districts at a later phase.

Objective 2: Improving the Quality of Instruction

The strategies for improving the quality of instruction include curriculum development and instructional development.

Curriculum development has usually been considered a central element of educational quality improvement and an important means to enhance the relevance of schooling. Almost 90% of the World Bank projects supporting qualitative change programs included support for curriculum development.¹³ Recent projects emphasize increasing quality improvement over expansion, as illustrated by the shift from support for pre-service to in-service teacher training.

Many curriculum development programs, especially those focused on the revision of syllabi and the introduction of new subject matters, have failed to meet expectations.¹⁴ Curriculum implementation was often the weakest link in the curriculum reform process. The most successful programs were those that supported a combination of curricular reforms, in-service teacher training, administrative and management training, and the provision of instructional materials.

A common theme in curriculum development, especially in the 1970s, was the ruralization of the curricula through the inclusion of domestic or rural subjects and pre-vocational skills. The projects typically provided physical plants and equipment for these subjects and supported the development of new syllabi. More than half of a sample of 25 primary education projects approved between 1972 and 1983 supported curriculum ruralization programs. In addition, several projects attempted to introduce metal/woodwork, bricklaying, and simple electrical repairs.

Most of these "practical subject" curricular reforms ran into significant implementation problems, especially those emphasizing vocational skill development projects. Introducing a new subject in an already overcrowded curriculum (often including two languages) has never been easy, but for practical subjects, the problem of implementation have been compounded by the often significant program cost, the requirement for specialized teacher skills, and parental expectations.

Instructional improvement has been a consistent feature of Bank lending for primary education over the past 20 years. Support for the provision of textbooks, in-service training of teachers, and distance education have been the principal means.

Textbook provision is a central element in Bank lending for primary education. Before 1978, less than 10% of the Bank projects included support for textbooks. Between 1979 and 1983, 32% of the projects included a textbook

¹³ Verspoor, "Implementing Educational Change."

¹⁴ World Bank, "Education Sector Policy Paper."

component. Sixty-six percent or 27 of the FY89-90 projects had textbook components.

A 1985 review¹⁵ found evidence of considerable achievement. The most successful projects recognized that textbook publishing was complex and highly technical, that it required professional competencies in many specialties, and that developing a good textbook took time, three years at the minimum.

However, even with this recognition, projects underestimated the difficulties in management and institutional development. Problems in textbook provision included poor quality books, inadequate distribution systems, inability to establish and maintain production schedules, inadequate procedures to handle paper procurement, teacher training not synchronized with book publication, poor coordination between curriculum and manuscript development, and, above all, failure to establish institutions that continue to provide good quality books after project completion. Of the nine FY65-77 projects surveyed in detail, only three left behind functioning textbook provision systems.

The lessons from these early projects were rapidly absorbed. Textbook components approved between FY77-83 were more thoroughly designed, using expert knowledge whenever necessary, and paying much more attention to the issues of sustainability and institutional development. In recent years, investments in textbooks are among the most carefully designed and most successful elements of Bank lending for education.

The 1985 review recommended that future projects needed to address the following issues: planning a long-term capacity building program; careful analysis of the trade-offs involved in the critical decision of whether to publish, to purchase, or to adapt; and ensuring financial sustainability of book provision schemes beyond the initial investments.

The issue that has been neglected and needs urgent attention is the quality and the sequencing of the content of textbooks. A recent review¹⁶ found that textbooks for math and reading in many developing countries progress to advanced levels more rapidly than the typical textbook in developed countries.

Distance education is usually taken in the Bank to refer to the delivery of education programs via radio or television broadcasting and correspondence. In primary education, distance education has been designed to enrich face-to-face teaching, or to complement or replace teachers for some of the time to improve the quality of instruction in mathematics and language. Between 1963 and 1985, about 20% of the Bank's primary education projects included distance education components.

The first Bank involvement in distance education was the Ivory Coast education television experiment, which produced only marginal education benefits

¹⁵ Searle, "General Operational Review of Textbooks."

¹⁶ Paxman, et al., "Analysis of Research on Textbook Availability and Quality in Developing Countries."

in spite of very substantial external investments. After ten years, it had become clear that Ivory coast would not be able to sustain the immense add-on cost of educational television.

Similarly, a 1987¹⁷ review of Bank experience found little additional benefit for distance learning programs designed for enrichment purposes. Where distance education was used for improvement of instruction in core subjects by complementing or replacing face-to-face teaching, evidence of learning gains has been found. Where broadcasting is complemented by printed materials, the additional cost are, however, not insignificant.

Distance education has encountered significant implementation problems¹⁸ at the school level in many countries, especially when the technology is unfamiliar to the teacher and difficult to adapt to classroom specific instructional imperatives. Replication beyond the pilot stage has often been difficult, especially in countries with weak administrative structures. The most successful applications have been at the secondary and higher levels and for in-service teacher education where the learners are more self-motivated than primary school pupils. Since 1985, few Bank projects have included provision for distance education programs to support primary education.

In-service teacher training is increasingly recognized as a crucial element of instructional improvement programs. About 60% of the primary teacher training projects reviewed by Haddad¹⁹ and 85% of the FY89-90 teacher training projects, included support for in-service teacher training. Verspoor found that successfully implemented educational reform programs made ample provision for permanent and locally available in-service training and professional support.

Whether carried out in the school itself, or at a local learning resource center within easy reach of area teachers, training provided to teachers as they go through the process of implementing reform programs has played an important role in the success achieved in a number of countries.²⁰

Three mechanisms for delivering in-service training stand out as the most efficient in these reviews. First, distance education, used mainly for general skill-upgrading programs, often include correspondence courses and radio programs. Good examples are Bank supported projects in El Salvador and the Philippines. Second, the "ripple," "echo," or "cascade" method has been found to be successful. This method targets at first a small core of personnel for training. They will, in turn, train a larger group, who will then train an even larger group and so on. The provision of well developed training materials is essential to ensure the maintenance of standards in these programs. Bank projects

¹⁷ Hawkridge, "General Operational Review of Distance Education."

¹⁸ Verspoor, "Pathways to Change."

¹⁹ Haddad, "Teacher Training."

²⁰ Verspoor, "Pathways to Change."

in Thailand, Bangladesh, and Malaysia used such an approach and have a record of success. Third, teacher resource centers at the district or sub-district level, for example, central schools, serve as the locus for short, recurrent in-service training and allow teachers the opportunity to familiarize themselves with new materials and meet fellow teachers. Examples of this approach are found in Ethiopia and Indonesia.

The effectiveness of in-service training programs was further enhanced where systems for school-level support and supervision were established and the content explicitly designed to take account of the level of knowledge and experience of the typical course participant. Finally, a common source of problems was the under-funding of in-service training.

Objective 3: Increasing the Efficiency of Program Delivery

Attempts to increase the efficiency of resource application in primary education have focused on containing the cost per student, manipulating student flows, and reallocating available resources.

Containing cost per student has been an important element of Bank supported strategies in many of the poorest countries. Since teachers' salaries often account for as high as 95% of the total expenditures on primary education, these efforts have centered on the efficient utilization and deployment of teachers.

A review of a sample of 30 projects, selected on the basis of their support for ambitious reform programs and approved between 1986 and 1988²¹, found that almost 30% of them supported measures to increase the efficiency of teacher utilization. These measures included increasing teacher/student ratios by promoting double-shift and multiple-grade teaching, and controlling teacher salary expenditures. Projects in Colombia and Senegal provide evidence of well designed multi-grade and double-shift systems. (See Box 2.)

Manipulating student flows through reduction in repetition and drop-out rates and through changes in administrative procedures to raise the passing rates was another strategy to increase efficiency. This strategy was included in about one third of the projects in the above-mentioned sample. A few projects linked the analysis of cost per student to the cost per graduate, and were able to advocate increasing the former in order to reduce the latter, thereby increasing the input/output efficiency of the system.

The manipulation of student flows through automatic promotion did little to guarantee that pupils passing through the school system have actually learned something. A better strategy is to prevent failure through improvement

²¹ World Bank, "Annual Operational Review Fiscal 1988 Education and Training."

of instructional quality.²² The EDURURAL project in North East Brazil provides evidence of the cost-effectiveness of this strategy.

**Box 2: Multi-grade Teaching in Colombia and
Double-Shift System in Senegal**

The *Colombian Subsector Project for Rural Basic Education* (1982) supported a revised system for rural primary education, known as *Escuela Nueva* (New School). It included multi-grade teaching in small (one or two classrooms) rural schools, as well as a new curriculum and provision of student and teacher materials. The curriculum incorporates flexible promotion practices based on mastery of prescribed skills and allows for grade promotion throughout the school year.

Teachers are prepared for delivering the program through a one-week introductory workshop and two follow-up workshops also of a week each. The first workshop comprises of an introduction to the materials and other elements of the program, including the role of student assistants and the layout and use of "activity corners" for different groups. The second workshop is devoted to promotion procedures and multi-grade teaching. The third workshop reviews earlier sessions and concentrates on educational evaluation and problem solving. A 1987 evaluation of *Escuela Nueva* concluded that in terms of academic performance the students performed significantly better than those in traditional schools in third grade mathematics and fifth grade Spanish and mathematics.

In Senegal, the decline in achievement scores and high repetition rates in the primary education system are partly attributable to overcrowded classrooms. In urban areas, 27% of the classrooms (1,666) had between 70 and 120 students per classroom. To alleviate this problem, the *Senegal Primary Education Development Project* (1986) introduced a double-shift teaching system based on two cohorts, two teachers and one classroom of about 60 students each. The project improved student performance by sensitizing parents to the new system, and training and supervising teachers in new methods. Students in the double-shift system scored higher in reading, writing and math than students in regular classrooms, despite the reduction in teaching time.

An important aspect of both double-shift and multi-grade teaching is the development of appropriate materials and the training and support of teachers in their application. A well designed program with support from teachers, parents and district education departments is both cost-effective and quality enhancing.

²² Haddad, "Educational and Economic Effects of Promotion and Repetition Practices."

The Bank loan supported the improvement of quality in Brazilian primary schools through the provision of textbooks, more training and better pay for teachers, improved administration, and setting achievement standards. (See Box 3.)

**Box 3: Research Components and Information Provision:
EDURURAL in North East Brazil**

As part of a World Bank loan to Brazil, primary schools in 400 municipalities in nine northeastern states were earmarked for investment in quality improvements, such as the provision of textbooks and classroom materials, more training and better pay for teachers, improved administration and better standards for classroom size and capacity. Of this loan, \$1.25 million (1.4% of total project costs) was allocated for an evaluation of the project's contribution to increasing primary school enrollments, reducing repetition and dropout rates, and improving the efficiency of learning. The research was undertaken by the Federal University of Ceara (UFC) and its research foundation (FCPC) in cooperation with three State Secretariats for Education and Culture (SECs). The Carlos Chagas Foundation, the State University of New York at Albany, and the Bank provided substantial technical assistance. The Bank External Research division provided funding of an additional \$307,000.

This evaluation is a good example of national efforts and international cooperation to produce empirical research that examines how the educational process works in Northeastern Brazil and to contribute to the theoretical analysis of how and why children learn. There was close collaboration between State Secretariats and University staff. The UFC researchers prepared and pretested four sets of instruments (questionnaires for schools, teachers, students and families). The Carlos Chagas Foundation prepared the student achievement tests. Trained field workers from the SECs, as well as a thousand teachers in 600 schools, conducted the interviews and administered the tests. The data, gathered from 6,000 students and their families in 70 municipalities over a five-year period from 1981 to 1985, are some of the richest in the developing world. The Fundacao de Pesquisa e Cultura in Fortaleza has some 100 volumes covering 7 years of project activities. Several other articles, in both Portuguese and English, have their origins in information available from the research.

However, the evaluation was not without problems. By focusing on the impact of measures taken, the evaluation neglected the opportunity to understand the process of implementation and its impact on efficiencies and achievement. Finally, the impact of the educational research component on policy change at the National level is unknown. There has been some impact at the State level, and the University professors now include more quantitative analysis in their teaching.

Reallocating available resources towards non-salary recurrent expenditures to ensure the availability of at least a minimal supply of instructional materials is an increasingly important feature of Bank primary education projects. A growing number of projects include explicit agreements to protect budget allocations for these expenditures. The effect of these agreements has been quite positive in many of the poorest countries. In Ghana, for example, the availability of instructional materials has been substantially increased as a result.

Objective 4: Strengthening Education Sector Management

Managerial weaknesses have long been recognized as a major constraint on effective educational development. Three categories of related issues can be distinguished²³: (i) decision making; (ii) planning; and (iii) evaluation research. Bank support for management improvement has been frequent (included in two thirds of the projects approved during the FY63-83 period), but small, representing only about 5% of total Bank lending during that period.

Decision making in many developing country education systems is highly centralized. This conflicts with the dominant technology of the education enterprise²⁴ and is a major source of inefficiency in resource deployment and implementation of reforms. Excessive centralization most severely affects primary education. Ultimately, the fate of educational reforms and innovations is affected by local conditions and decided at the school level and in the classroom, where the influence of central administrative authority is limited.

Several Bank projects have attempted to address this issue by supporting programs to increase decision making capacity and authority at the local level. The most common way has been the support of "nuclearization" or "clustering" programs. The programs usually have grouped schools into administrative clusters around a central school which is endowed with additional resources to support the educational improvement programs in associated schools. Programs in Latin America (Guatemala and Honduras, for example) and Asia (Bangladesh and Nepal, for example) have adopted this approach with promising results.

A major weakness in Bank support for education management and administration has been the relative neglect of programs to train headmasters and other local administrators. Where training has been supported, it has often been focused on purely administrative matters rather than on issues of instructional leadership and community relations.

The most successful Bank-supported educational reforms have emphasized both local capacity building, mainly through clustering of schools and training of local administrators, and strengthening of central institutions for planning, research and program implementation. These investments in capacity building have been successful where they have been sustained over a period of time, usually

²³ World Bank, "Primary Education."

²⁴ Verspoor, "Planning of Education: Where Do We Go?"

exceeding five years. For example, Bank support to Ethiopia, which was sustained for more than a decade, has resulted in the establishment of a strong local capacity for school construction, textbook development and procurement, and educational planning. In the Philippines, a Textbook Board developed with Bank support played a key role in the design and implementation of effective textbook development and procurement policies. In Bangladesh, the Academy for Fundamental Education, the Textbook Board, and the National Curriculum Development were supported under Bank projects and provided a strong institutional base for developing and coordinating national primary education policy.²⁵

Educational planning has been a mainstay of World Bank support aimed at improving education management. Strengthening educational planning was the primary objective of Bank assistance in 74 of the 80 countries between 1963 and 1983.²⁶ Much of this support provided financing for expatriate technical assistance.

The results have been mixed with often valuable short-term outcomes but limited long-term improvements in national planning capacity. Much of the assistance focused on data collection and analysis, while neglecting implementation issues, as so often in the traditional educational planning model.²⁷ Both above-mentioned reviews argue strongly for emphasizing institutional analysis and systematic and sustained support for management development programs. In addition, Middleton²⁸ recommends, on the basis of his review of extensive project evidence, a much more flexible, task-specific, and implementation-focused approach toward educational management.

Evaluation and research components have been consistently supported by World Bank education projects for the past two decades. For example, between 1982 and 1989, 116 of the 146 projects that were appraised during that period provided financing for 436 planned studies. Nevertheless, in most cases financial support for these components was limited, representing only 1-2% of the total loan amount. Most studies focused on the availability of education inputs, cost and finance studies, and the feasibility of the development of information systems. Only a small fraction of these studies (5.6%) was designed to measure educational outcomes, such as academic achievement.²⁹ (See Box 4.)

²⁵ Middleton et al., "Management in World Bank Education Projects."

²⁶ Noor, "Strengthening Education Management."

²⁷ Verspoor, "The Planning of Education."

²⁸ Middleton, "Management in World Bank Education Projects."

²⁹ Lockheed and Rodd, "World Bank Lending for Education Research, 1982-89."

**Box 4: Measuring Educational Outcomes:
Achievement Testing in the Philippines**

Without the ability to assess educational outcomes, the impact of specific interventions on the educational process cannot be known. The *Philippines Second Elementary Education Project* addresses this issue by including an annual assessment program of elementary student performance in order to routinely provide achievement data.

The National Elementary Student Assessment Program will produce annual information on: the performance of students in selected grades (2, 4, and 6) and subjects (language, mathematics, science, and social studies); on home and school characteristics that relate to educational performance; and, in the long run, on sector performance over time. The assessment will allow for comparisons by geographical area, socio-economic status, gender, type of community, type of school and other characteristics that address important issues of resource distribution. The results of the assessment will be disseminated through the publication of subject reports. Thirty-thousand booklets describing annual assessment objectives will be distributed to school principals, teachers, and national and regional leaders. Technical reports and other publications will serve research and policy analysis purposes.

One important element of the program is the clear delineation of roles and responsibilities, coupled with the close collaboration of several Bureaus, Regions, Divisions, Districts and Schools. The Project will be managed by the Under Secretary for Research. The Director of the Research and Evaluation Division of the National Educational Testing and Research Center (NETRC) will have principal responsibility for day-to-day operation. All instruments for the national assessment would be developed with the assistance of the Center for Educational Measurement. The Bureau of Elementary Education and the Department of Education, Culture and Sports will also provide information and statistics. Two committees have been created to advise the NETRC, a National Advisory Committee, on policy matters and a Technical Advisory Committee on overall design and implementation.

The program also recognizes the need for cooperation at the school level. Regional meetings will be convened to train school personnel in administration, and quality control visits will be organized during administration. Summaries of results will be mailed to schools to act as scripts for staff meetings and to encourage discussion of the results.

Over the past two decades, there has been little progress in monitoring and evaluation of Bank-supported projects. Most evaluations have emphasized the

delivery of inputs with very little attention to program outcomes or cost effects. The development of national capacity are not always sustained.³⁰

The absence of measures of educational achievement is a major weakness in Bank lending for education, including primary education. It has hampered the ability of the Bank and developing countries to monitor the impact of investments in education and learn lessons from experience. A major constraint has been the weakness of local educational research and evaluation institutions and the ineffectiveness of short-term expatriate technical assistance for building sustainable national capacity in this area which is technically complex and requires in most instances significant technology transfers.

Support for small-scale experimentation and testing has been an important feature of Bank projects that introduce educational reform and innovation. About two thirds of a sample of such projects which were judged at least partially successful included support for a pilot phase or a small scale experiment to be conducted before replicating on a larger scale. The weakness of monitoring and evaluation capacity has limited the effectiveness of these pilots, although, in many instances, important lessons about implementation strategies have been learnt.

Main Lessons

Figure 2 summarizes schematically the objectives and strategies of the various interventions for primary education development included in World Bank supported primary education projects.

Twenty years of investment in primary education in 51 countries provides a rich and diverse source of lessons to help meet the challenges ahead. At a more general level, five principal conclusions can be drawn.

First, sustainability of the investment underlies success in all categories of educational objectives. This has two direct implications. Cost-effectiveness in the provision of physical infrastructure, teacher training and instructional materials is critical, and capacity building must accompany direct investments in schooling.

Second, experimentation and testing of new approaches is essential. Educational practice is site-specific and cannot be transferred easily. Bank experience confirms quite clearly that there are no generally applicable recipes for educational development and school improvement; what works in one country, state, district, or school does not necessarily work in another setting.

Third, the quality of implementation at the local and school levels is the critical determinant of project success. Community involvement in school construction and parental support for schooling must be systematically mobilized. Training of headmasters and professional support targeted at schools are important ingredients of successful interventions.

³⁰ Middleton, et al., "Building Educational Evaluation Capacity in Developing Countries"; and Searle, "Evaluation in World Bank Education Projects."

Fourth, management issues are critical; systematic institutional analysis and early emphasis on building local and central capacity for managing educational development are essential to all implementation strategies. The principal weakness of Bank supported primary education projects is the absence of a systematic measurement of student learning and evaluation of effectiveness of various interventions.

Fifth, successful programs aim at comprehensive change, but adopt a phased implementation strategy with considerable experimentation and testing in the early phases. Curriculum change is combined with the provision of materials, in-service teacher training, and administrative and management training. The end result is a multi-faceted design with several objectives supported by a mix of interventions.

Figure 2: A Summary Chart of the World Bank's Primary Education Investment Objectives, Strategies and Lessons

Objectives	Strategies	Main Lessons
Expanding Educational Opportunities	School Construction <ul style="list-style-type: none"> Promoting local design, labor and materials Prefabricating components Mobilizing voluntary community labor 	Problems included transportation; management; training of workers; synchronizing site preparation with component delivery; and maintaining minimum standards. Better use existing facilities and introduce double-shift and multi-grade teaching to avoid construction of new buildings.
	Pre-service Teacher Training <ul style="list-style-type: none"> Expanding and improving existing programs Modifying recruitment criteria Limiting programs to professional and practical training 	Shifted away from the provision of hardware for pre-service training to support for educational inputs and in-service training. Important to consider alternative strategies and analyze the trade-offs between economic efficiency and educational effectiveness in designing teacher training programs.
	Demand Mobilization <ul style="list-style-type: none"> Providing free uniforms Recruiting female teachers from local communities Housing for female teachers Locating schools closer to community Building sanitary facilities for girls 	Important to pay attention to cultural, religious and financial barriers in designing interventions.

Figure 2: A Summary Chart of the World Bank's Primary Education Investment Objectives, Strategies and Lessons

Objectives	Strategies	Main Lessons
Improving Instructional Quality	Curriculum Development	Curriculum implementation is often the problem. Successful programs supported a combination of curricular reforms, in-service teacher training, administrative and management training, and the provision of instructional materials. The program cost, the requirement for specialized teacher skills, and parental resistance have compounded the problem of introducing practical subjects.
	Revising syllabi	
	Ruralizing curricula	
	Introducing practical subjects	
	Instructional Development	Textbook publishing is complex and highly technical, and requires professional competencies in many specialties. Developing a good textbook took three years at the minimum. Future projects need to analyze the trade-offs in deciding whether to publish, to purchase, or to adapt, and to ensure financial sustainability of book provision schemes beyond the initial investments. Important to pay attention to the pedagogical and physical production quality of textbooks.
	Providing textbooks and other instructional materials	
	Providing in-service teacher training	Efficient delivery of in-service training includes the use of the cascade method, teacher resource centers and distance education. Important to establish school-level support and supervision and to take account of teachers' level of knowledge and experience in content design.
	Using educational technology	Educational technology can work when it is part of a well-designed instructional system. Effective designs entail establishing a fit among an educational problem, the pedagogical suitability and cost-effectiveness of the technology chosen; identifying technological, administrative and political barriers to change; and creating an effective strategy for implementing change.

Figure 2: A Summary Chart of the World Bank's Primary Education Investment Objectives, Strategies and Lessons

Objectives		Strategies	Main Lessons
Increasing Efficiency of Delivery	Containing cost per pupil	Increasing student/teacher ratio by double-shift and multi-grade teaching	Increasing the efficiency of teacher utilization has been effective in containing cost.
		Controlling total expenditure on teachers' salaries	
	Manipulating student flows	Introducing automatic promotion	Automatic promotion did little to guarantee that pupils passing through the school system have actually learned something. A better strategy is to prevent failure by improving instructional quality.
		Improving instructional quality to prevent repetition and dropout	
Strengthening Educational Management	Reallocating available resources	Protecting non-salary, recurrent expenditure for instructional improvement	Bank-Borrower agreement to ensure the provision of instructional materials.
	Building local capacity	Supporting school nuclearization	Important to strengthen local autonomy and to train principals and local administrators to improve educational management, instructional leadership and community relations.
		Emphasizing institutional analysis	
	Planning	Introducing flexible, task-specific and implementation-focused management	Traditional educational planning focuses on data collection and analysis, while neglecting implementation issues. Important to stress institutional analysis and management development.
		Measuring educational outcomes of policy intervention	
	Evaluation and Research	Experimentation and testing	Evaluation and research are technically complex and require in most instances significant technology transfers. A major constraint has been the weakness of local educational research and evaluation institutions and the ineffectiveness of short-term expatriate technical assistance for building sustainable national capacity.
		Monitoring of phase-implementation	

III. NONFORMAL EDUCATION AND TRAINING: INVESTMENT OBJECTIVES, STRATEGIES AND LESSONS

Nonformal education and training (NFET), defined as learning that is not part of a country's regular school and training system, provides basic literacy to adults who have little or no formal schooling and to children who do not attend formal schools because they live too far away or their parents need them to work. In addition, NFET programs teach adults basic knowledge about health and nutrition, and agricultural and craft skills that can help them improve their living standards.

The objectives of the NFET programs supported by the Bank can be classified in three categories: (i) development of practical skills; (ii) promotion of basic literacy; and (iii) preparation for income generating activities.

Overview

Through 1989, 92 of the 375 Bank education projects financed by the Bank have contained NFET components;³¹ only 45 contained support for basic literacy training. Many of these components were small, less than US\$1 million. Only six projects included NFET components of US\$10 million or more, and in only one third of the projects did NFET comprise more than 10% of the total cost.

About two thirds of the NFET programs included support for the development of new curricula. Less than one fifth included financing for reading materials. About one fourth provided for audio-visual aids and materials.

Specific arrangements for evaluation were made in about 30% of the projects, and, in almost all instances, entrusted to existing regular permanent agencies. Most of these evaluations focused on the effectiveness of delivery mechanisms and on assessment of the number of clients served. There are no reports of successful efforts to evaluate the achievement of learners.

While there are a few successes, the outcomes of many of these programs have been disappointing. This has been a major factor in the decline of Bank lending for NFET since 1985. The experience of the Bank, limited as it may be, contains many important lessons which need to be considered in re-examining ways to tap the potential of these programs to improve the quality of life and the productivity of the poor.

Objective 1: Development of Practical Skills

Practical skills training is the most common type of program for which the Bank has lent, comprising about 80% of all NFET programs. The teaching of agricultural or farming skills was the predominant area of interest, although a number of projects supported training in other rural vocational skills. Most

³¹ The discussion in this chapter draws very heavily on Romain and Armstrong, "Review of World Bank Operations in Nonformal Education and Training."

were based on the general notion of keeping out-of-school rural youths in rural areas, rather than specifically identified opportunities to generate income.

A second set of programs attempted to create a low-cost alternative to primary education. This strategy was especially prevalent in Sahelian countries with very low enrollment ratios, such as Benin, Burkina Faso, Mauritania, Senegal, and Somalia. These programs, however, were not able to bring students up to school-equivalent levels, and, therefore, did not constitute a real alternative to primary schooling and were rejected by parents. A few attempts to provide access to primary schooling to hard-to-reach populations, such as nomads, were unsuccessful mainly because demand constraints were insufficiently appreciated.

Successful operations were typically training programs that focused on a specific and well identified need (water management in Mauritania, for example), or which provided training to special interest groups on request (Thailand and Yemen Arab Republic, for example). In addition, these programs paid considerable attention to the development of specialized agencies (Nonformal Education Department in Thailand, National Board of Nonformal Education in Yemen Arab Republic, and INACAP in Chile, for example). The implementation of these programs was phased over a decade or more, allowing the responsible agencies to learn from experience and gradually develop an experienced staff.

The teaching of family life skills was part of the practical training package in about 80% of the cases. Where the program was part of a larger practical skill program, it was not possible to identify outcomes for this type of programs separately.

Objective 2: Promotion of Basic Literacy

Support for literacy programs was included in 49% of the NFET programs supported by the Bank. The allocation of funds to the literacy component was, in fact, negligible. Of the completed projects with literacy components, 35% did not even mention the literacy component in the completion report and only about 25% was satisfactorily carried out. Basic literacy programs in Mali and Indonesia, however, were considered to have had outstanding results.

The successful projects had relatively large project components which had in common strong government backing, considerable support for strengthening the national management and implementation capacity, and adequate assistance for materials productions.

Objective 3: Preparation for Income Generating Activities

Income generating projects typically provide access to credit or development grants in conjunction with training. Small grants or loans are designed to help participants expand their productive activities while acquiring literacy, numeracy, and entrepreneurial skills. Income generating learning programs were included in projects which treated NFET as a significant subsector and typically comprised a much larger portion (40-100%) of the loan than any other NFET programs.

These income generating projects, especially the one in Indonesia, have proven to be quite successful. The evidence of the few Bank supported cases seems quite positive. Combining income raising programs with literacy appears to affect both aspects positively. (See Box 5.)

Implementation Strategies

Radio and television broadcasting was used to disseminate educational messages in about 30% of the NFET projects. With the exception of the Thailand project, little evidence of effectiveness has been reported³⁰. On the other hand, these components were not implemented in several projects and technical difficulties hampered effectiveness in many others.

Mobile units, typically vehicles carrying audio-visual aids and other training equipment, were provided in 20% of the NFET projects. The experience with them has not been positive, and they rarely served the intended purposes effectively. The lack of software, such as films and slides, and spare parts created implementation problems in almost every case for which information was available.

Reading materials were provided only in 20% of the NFET programs and in 16 out of the 45 literacy programs. While there may have been other source of reading materials in some projects, it remains surprising that so few projects included the provision of reading materials. The Mali project supported the production of reading materials in local languages and even produced a rural newspaper. Considerable materials were produced in the successful Thailand and Indonesia projects.

Shared use of school buildings and teachers was a feature in many projects that seemed attractive on the surface but which often encountered difficulties in practice. Problems of conflicting claims on space, distance, and image adversely affected program effectiveness. Similarly, teachers trained in the formal system were often poorly prepared for the special demands of adult education and training. Where voluntarism was expected, it was rarely sustained.

Training funds for responding in a flexible manner to locally generated NFET requests were only established in a few projects (Indonesia and Yemen, for example), but the arrangements worked well. It is highly significant that these arrangements were continued and strengthened through follow-up projects in these countries.

³⁰ Several positive outcomes are reported for distance education programs which prepare adult learners for formal secondary equivalency exams. See David Hawkrige, "General Operational Review of Distance Education."

**Box 5: Learning and Earning: Nonformal Education
in Indonesia and Yemen Arab Republic**

The low level of adult literacy in many countries is a major constraint to development. Nonformal education provides basic literacy in conjunction with health, nutrition and vocational training to the large proportion of illiterate adults and out-of-school youth. Two of the successful Bank-supported programs are on-going in Indonesia and Yemen Arab Republic.

The Bank has loaned over \$100 million to help PENMAS, the Indonesian Directorate of Community Education, to provide a core of complementary training programs in basic literacy, family life education, and vocational training. In 1977, the first year of Bank lending, PENMAS enrolled about 400,000 learners. By 1983, five million learners had been assisted by the program, of which 4.4 million were in basic education classes, and the remainder in vocational training and small business development.

The Small Business Component (called Learning Funds) experimented in the creation and operation of small-business enterprise. The learning funds supply matching grants to production groups in over 500 different types of business. Training in marketing, simple accounting and business management techniques is provided with the loan. As the loans are repaid, the money is supposed to help start new groups, with technical assistance supplied by existing groups. It is estimated that the individual rate of return to investment (the rate of growth of individual income compared to the rate of growth of the cost of training) is about 25%.

In the early 1970s, an experimental nonformal component was included in the First Education Project to Yemen. Known as the Basic Training Scheme (BTS), the program relied on District Training Centers (DTCs) to disseminate basic vocational skills and literacy training. The initial implementation problems associated with new staff, uncertain official support and low mobilization were overcome in later projects, which emphasized a bottom-up approach and responsiveness to village needs. Community councils were created which advised DTCs on relevant training in response to demand--offering more courses for women, or shortening the length of courses to accommodate a larger number of enrollees.

A Basic Training Fund (BTF) was initiated to enable DTCs to foster and establish village units in surrounding areas. The fund allows for requests from Directors of DTCs to establish satellite training centers. Items financed include civil works and equipment and furniture. Recurrent costs are met by the DTCs. Individually, the items financed by the BTF have been small, but they have had a major impact as catalysts of change and development in rural areas. By 1983, over 75 villages had education centers funded from BTF. Participation rates in Adult Education programs increased from 2,200 in 1980 to 22,000 in 1983.

Main Lessons

Nonformal education projects have had more than the usual share of implementation problems. This is not surprising since the appropriate method for delivering these components on a large scale is not well developed. Four lessons emerge from the limited Bank experience in this area. Figure 3 summarizes the objectives, strategies and lessons of Bank investment in this area.

First, small components have at best yielded small benefits; often they have not been given the attention in preparation and supervision that they needed. The best results have been achieved in free-standing projects or projects where at least 30% of the funds was allocated to NFET. Running NFET programs as an appendix to formal programs jeopardizes potential success.

Second, experimentation and piloting of delivery strategies, programs, and materials are essential. Evaluation, including assessment of learning achievement, is critical in a systematic process of learning about what works and what does not work. Unless outcome evaluations will be systematically developed, the renewed interest in NFET will not be sustained. If outcomes are not measured, reductions in budget allocations have no known cost.

Third, the most successful programs have built-in mechanisms to respond flexibly to requests for training from the beneficiaries, on the basis of clearly spelled out procedures and criteria. Also, when income generating training is included in the package, chances for success increase.

Fourth, attending to management and institutional issues is very important. Where programs have worked, there have been significant investments in building administrative and managerial capacity.

Figure 3: A Summary Chart of the World Bank's NonFormal Education and Training Investment Objectives and Strategies

Objectives	Strategies	Main Lessons
Practical Skills Development	Broadcasting through radio and television to disseminate messages	Successful programs focus on a specific and well-defined need, or provide training to special interest groups on request. They paid attention to the development of specialized agencies.
Promotion of Basic Literacy	Using mobile units to promote literacy and other training	Successful projects had strong government support, considerable support for strengthening the national management and implementation capacity, and adequate support for production of materials.
	Providing reading materials	
Preparation for Income-Generating Activities	Using a school building and teachers in the formal education system for NFET.	Successful projects combine income-generating programs with literacy programs. The use of radio and television broadcasting and mobile units, and the shared use of school buildings and teachers are not effective and sustainable strategies to promote NFET. Important to provide reading materials in literacy programs and training funds to respond to local requests.
	Setting-up training funds to respond to locally generated NFET requests.	

IV. CONCLUSIONS AND IMPLICATIONS

The World Bank has been most successful in supporting educational development where it has followed a lending strategy which comprised at least four elements: (i) in-depth analysis of (sub)sector issues; (ii) concentration on a few policy and institutional objectives; (iii) a persistent commitment to these over an extended period of time; and (iv) an explicit delegation to the Borrower of the responsibility for sectoral analysis and policy formulation, project development, and implementation³¹.

These general lessons apply fully to the Bank support for basic education. At the same time, they suggest the need to structure the investment instruments³² in a way that is congruent with the specific technical and organizational characteristics of basic education.

Design Imperatives for Basic Education Investments

The experience of the World Bank's investment in basic education, reported in the proceeding chapters, suggests that four features of basic education development programs must be taken into account in project design:

- The *quality of the school-level implementation* of a fairly standard set of inputs in primary education programs is the principal determinant of outcomes. NFET are usually more experimental in the inputs they provide and face even greater challenges in this respect.
- The *context* in which the program is implemented strongly affects the quality of implementation. What works in one place may not be effective in another. Interactions between students, teachers, parents, and administrators have a strong impact on program implementation. Transformation and adaptation of the original program design should be the rule rather than the exception.
- An effective *administrative organization* and efficient management processes are pre-conditions for good implementation. The investment experience of the Bank provides ample evidence for the central role of competent national or state and district level institutions to effectively support schools and NFET institutions.

³¹ Verspoor, "Accelerated Educational Development"; and Fredriksen, "Increasing Foreign Aid for Primary Education."

³² I use the term "investment instrument" in this context to describe the mechanism that is selected to regulate the flow of resources from central authorities to the end-users such as schools, school districts, or NFET deliverers.

- The absence of support for mechanisms to assess *program outcomes* is the critical design weakness of Bank projects in primary education and NFET. There is little information on the impact of the program on learning and skill acquisition.

In most instances, Bank support for basic education has been designed to help countries implement large-scale programs of educational development. This tendency has become stronger over the years. Even where the Bank has supported small-scale experiments, these have always been designed with the hope of developing a model that subsequently could be replicated nationwide. Large-scale educational development pose a set of special management problems that will need to be addressed if interventions are to be successful. The dilemmas of implementing large-scale change programs at the school level are presented in Table 5.

Table 5: Dilemmas of Large-Scale Programs

Features of large-scale change programs	Constraints of school-level implementation
COMPLEXITY	
i) Complex programs comprising a bundle of innovations with multiple and open-ended objectives.	Limited capacity to absorb change, calling for simple and well-defined programs.
COMMITMENT	
ii) Responsive to issues perceived as priorities by central policymakers and planners.	Priority issues at the school level may be different; local commitment to national programs is often limited.
CONFORMITY	
iii) Program design sets out intervention strategies that are to be applied generally.	Specific conditions of each school (district) may limit applicability of nationally defined intervention strategies.
CONSTRAINED RESOURCES	
iv) Emphasis on program adoption, limited resources for external assistance to the schools.	Need for costly long-term school-level support and locally available training.

The dilemmas of implementing large-scale change programs at the local level apply even more strongly to NFET programs. The capacity to implement NFET programs where none existed before is limited. The central planner's view of what the people need is often very different from what the people want at the moment the program becomes operational³³. Training needs are much more context-specific, and the limited availability of resources often leads to a neglect of professional support and a reliance on voluntarism.

The major challenge for basic education programs is to reconcile the features of large-scale programs with the constraints of local-level implementation. It is, therefore, important to take into consideration implementation issues at the stage of project design.

The more successful projects have developed effective ways to address the issues of project complexity; to elicit commitment from the change agents and from those affected by the intervention; to allow for flexibility in adjusting to local conditions; and to strengthen the resource base.

The problem of *project complexity* has been dealt with in two ways. First, many projects have adopted a strategy of progressive innovation,³⁴ by which a sequence of smaller projects implemented progressively ambitious innovations in a large geographic area over a decade or more. Taken together, these innovations have resulted in considerable change over time and the implementation of large-scale comprehensive reform. Bangladesh and Ethiopia illustrate this approach. A second approach is to simplify project design and drop certain elements of the projects during implementation. Quite often the victims are the NFET components.

Mobilizing and sustaining national *commitment* and local support is absolutely critical to successful implementation. One strategy is to communicate program objectives to local administrators, teachers, and parents from the outset, and be responsive to their needs. Programs that have made arrangements for providing support for requests emanating from the local level are among the most effective ones. The NFET programs in Indonesia and Yemen and Colombia's primary education project are successful cases.

To allow for *flexibility* in implementation, local-level conformity is required only for core program objectives. Considerable authority is delegated to local authorities for adapting the program to local conditions. A few successful NFET and some recent primary school improvement programs went so far

³³ In many instances, pre-investment needs assessments were not done. Even where they were done, the reality turned out to be different from the expectations based on survey results. See Romain and Armstrong, "Review of World Bank Operations in Nonformal Education and Training."

³⁴ Progressive innovation is a strategy designed to implement in a large geographical area (a country, a state, a province) a number of successive changes each rather modest in itself, which when taken together result in considerable change over time. The long-term objective is large-scale and comprehensive reform.

as to provide a fund or a line of credit that allowed them to respond to local investment proposals on the basis of a set of broadly defined criteria. (See Box 6.)

**Box 6: The Provision of Funds in Response
to Local Investment Proposals in Colombia**

The *Colombia Subsector Project for Rural Education* improved school quality at the primary level by decentralizing educational administration and delegating responsibility for program development to local administrators. A national program was set up to develop textbooks and educational materials and to train teachers, administrators and planners to support school improvement efforts at the local level.

To target funding to the most disadvantaged areas, Departments (states) were ranked based on the level of economic development and rural education needs to the counties (smallest administrative unit) within Departments. This ranking determined access to a centrally administered line of credit (the Fund of the Ministry of Education - FUNDO/MEN) directed by a National Executive Secretariat (NES).

Within Departments, local sub-projects were developed by school district directors, assisted by committees of heads of community organizations and head teachers of constituent schools. Each sub-project had to meet explicitly specified cost and performance criteria. Sub-project proposals were then appraised by Department Management Committees and forwarded to the NES for approval, before implementation in the form of a district action program. National programs, implemented and coordinated by the NES, were designed to support the funding of the local sub-projects.

Inadequate resources have often slowed down program implementation. In recent years, the World Bank has paid increasing attention to the need for securing budgetary allocations for human resource development. In many instances, for example, in Pakistan and Bangladesh, where these expenditures were so low as to preclude the development of the human capital base for social and economic progress, increase in public expenditures for human resource development has been discussed in conjunction with reductions in subsidies for inefficient state-owned enterprises and in excessive military expenditures.

The second strategy for strengthening the resource base is to support educational policies that make more effective use of public expenditures. For example, since class size has been found to have relatively little effect on academic achievement while instructional materials have been known to make a profound difference on learning outcomes, resources will be put to more effective use if they are spent on textbook provision than on reducing class size.

The third strategy for strengthening the resource base is to support community self-help efforts. A school improvement fund in Mali, for example, will provide matching grants to Parent Teachers Associations that launch school improvement efforts. In other countries, funds have been allocated to support community-managed school construction efforts. In a few projects, governments have agreed to use Bank funds to support non-government organizations working at the grass-roots level.

Investment Instruments

Bank supported education projects have not dealt effectively with the tension between the demands of large-scale coverage and local-level implementation. The policies and practices for the design, appraisal and implementation of educational projects are generally based on the procedures and investment instruments developed for infrastructure projects. The infrastructure model served the sector well during the period when the provision of physical facilities and equipment was a dominant lending objective. It emphasized the detailed costing of project inputs and the careful planning for their timely delivery over a four- to six-year period.

This traditional model is based on three main assumptions. First, it assumes that program objective and design can be standardized and transferred across a large number of beneficiary groups, while yielding essentially the same outcomes. Second, it considers the input delivery to be the dominant variable affecting outcomes. Third, it assumes that local implementers will do what program designers "know" is the right thing.

These assumptions rarely hold for basic education projects which need to respond to diverse local needs inherent in primary education development, and even more in NFET. A number of projects have, therefore, introduced a flexible alternative to the traditional project model. This investment instrument, known as the Sector Investment Loan, provides financing for a time-slice of broad (sub)sectoral development program, focuses on policy and institutional objectives, and delegates responsibility for detailed project design and implementation to the Borrower.

The benefits of this type of lending can be substantial. A review of the early experience with it in the education sector concluded that the Sector Investment Loan has effectively supported the development of key institutions for research, planning, policy analysis, and program implementation. Furthermore, it has improved decision-making capability, and encouraged the application of more objective criteria to investments in education.³⁵

The sector investment instruments differ from the traditional project loan in several ways:

- They are based on a broad (sub)sectoral development program. A ten-year action program (such as the one called for by the World Conference on Education for All) specifying policy measures,

³⁵ Johanson, "Sector Lending in Education."

institutional development priorities, investment programs, and recurrent cost implications would be a good example of a sub-sectoral development program.

- National staff take full responsibility for sectoral analysis, project development, appraisal and supervision of the implementations of the specific investments (sub-projects) that are the constituent elements of the subsectoral program.
- The responsibility for the appraisal and supervision of projects is usually discharged through an agency for the government, known as the intermediary.
- Bank appraisal focuses on the sub-sectoral development program and the effectiveness of the institutional arrangements of sub-project preparation, appraisal, implementation and evaluation. Bank implementation support focuses essentially on the intermediary through annual and bi-annual review meetings.

The Sector Investment Loan is, in fact, a line of credit for (sub)sectoral development that allows implementation with maximum flexibility and responsiveness to local conditions. (See Box 7.)

In many countries, however, the national institutions are not yet equipped to carry the responsibility for a full-fledged sectoral investment loan. In those cases, the sector investment loan mechanism has been adapted and limited only to those elements where national agencies exist and are sufficiently experienced to manage a subsectoral investment program. The management of school construction programs are increasingly being designed this way. Furthermore, several projects have established school improvement or training funds to support local initiatives in the context of projects that are for other components designed along more traditional lines. (See Box 8.)

The distinction between a traditional specific investment project and a sector investment project is, thus, not clear cut. In fact, there is a continuum of design options from which each country will have to choose in the light of prevailing local conditions and the dominant characteristics of the project.

**Box 7: Evolution in the World Bank's Approach to Lending for
Primary Education: The Malaysia Case**

Examples of the evolution of investment instruments can be found in Bank-financed projects in all regions of the world; project experience in Malaysia is illustrated here as a case in point.

The World Bank has financed nine projects in Malaysia since 1969, totalling US\$405 million at the primary, secondary and higher levels, as well as in technical/vocational and teacher training. In the primary sector, *Malaysia Education II* and *Education III* (1972 and 1974) included construction of a radio studio and supplies of receivers and equipment. This expanded the coverage of existing primary level educational broadcasts used to strengthen education delivery by under-qualified primary teachers.

Two years later, *Malaysia Education IV* assisted the Government in improving its capability to plan school construction by consolidating and reviewing national school building programs. Population data and information on existing facilities were studied to provide a national school mapping plan. At the same time, construction and equipment was provided for 848 primary schools in under-served areas of the country. To meet projected deficits in supplies of trained teachers, a new teacher training college was built, and an in-service training program was established for uncertified or poorly qualified primary teachers.

In 1986 the World Bank supported the first "primary and secondary education sector program" to accelerate policy reforms (*Malaysia Education VIII*). The project financed the first five-year phase of a ten-year educational investment program developed under the Fifth Malaysia Plan. Project funds were used to assist in carrying out the Government's Plan of Action covering infrastructure investments and 20 reform subprojects for institutional development at the national and state levels. During project appraisal, the Government and the Bank agreed on criteria for the subprojects, and performance indicators to monitor and evaluate their successful implementation. Funds were then released in tranches against evidence of satisfactory implementation.

Following the successful implementation of the first subsector project, a second subsector project (*Malaysia Education X*) was approved in 1989. Designed to support the same policy objectives, it will expedite the next stage of the Government's Plan of Action. The project will operate in a similar manner, with approval and implementation of national and state-level subprojects by the Malaysian authorities, and subsequent performance monitoring by the Bank staff.

**Box 8: Broadening Loans to the Education Sector:
Mali and Bangladesh Sector Loans**

The Republic of Mali Education Sector Consolidation Project (1989) introduced a new financial mechanism to mobilize additional resources for the expansion and improvement of primary education. The Basic Education Support Fund (Fonds d'appui à l'enseignement fondamental or FAEF) is funded by donors (initially IDA and USAID) to match contributions from Parents Associations (APEs), which are, in turn, leveraged by the resources of non-government organizations and Regional Development Committees. The matching ratio, initially 50:50, can vary depending on the type of activity supported or the region, providing a flexible intervention mechanism to compensate for economic disparities.

This approach is currently under experimentation in the Segou area. Six prototype schools are being constructed under the guidance of ACTION-ECOLE, an umbrella organization working with 18 non-government organizations (NGOs) in Mali. FAEF funding is available for sub-projects meeting certain pedagogic, financial and technical criteria, submitted by APEs for individual or groups of schools. Applications are screened at the Basic Education Inspectorate and regional Directorate levels, then approved at the central level by the FAEF Steering Committee. Examples of sub-projects include school canteens and local media campaigns aimed at convincing parents that schooling is a worthwhile investment, run by APEs or NGOs.

The Bangladesh General Education Project (1990) will support two government grant programs to increase access to primary schooling. One program will earmark funds for non-formal primary education to reach under-served areas of the country and older students of primary school age who have not had the opportunity for formal primary schooling. The other program will provide grant funds to NGOs and community groups seeking to run programs designed to make government primary schools more attractive to the poor and to girls. Twenty-five percent of this funding will go to less experienced community groups and to trainers who will help them develop their programs. Financing will be provided by donor (SIDA and Netherlands DGIS) grant funds, and the programs will be managed from the Project Coordination Office. Three percent of the funds will be used for evaluation purposes.

Conclusion

Twenty years of World Bank investment in basic education has many lessons of success, as well as of failure. Five features stand out as particularly important for project design:

- Support the locally determined processes such as school improvement, community mobilization and school location planning that drive educational development;
- Invest in those inputs that are most cost-effective;
- Test carefully how a particular investment package works out in a particular setting and monitor outcomes constantly;
- Strengthen the institutional capacity to manage strategic planning and management at the national or regional level and to manage operation at the district and school levels; and
- Design projects to allow for flexible response to a wide variety of local needs and unplanned events.

REFERENCES

- Fredriksen, Birger. "Increased Foreign Aid for Primary Education: The Challenge for Donors." PHREE/90/30, Washington, D.C.: World Bank, 1990.
- Haddad, Wadi. "Educational and Economic Effects of Promotion and Repetition Practices." Staff Working Paper, no. 317, Washington, D.C.: World Bank, 1979.
- _____. "Teacher Training: A Review of World Bank Experience." EDT Discussion Paper, no. 21, Washington, D.C.: World Bank, 1985.
- Hawkrige, David. "General Operational Review of Distance Education." EDT Discussion Paper, no. 68, Washington, D.C.: World Bank, 1987.
- Johanson, Richard. "Sector Lending in Education." EDT Discussion Paper, no. 18, Washington, D.C.: World Bank, 1985.
- Lockheed, Marlaine, John Middleton and Greta Nettleton. "Educational Technology: Sustainable and Effective Use." PHREE/91/32, Washington, D.C.: World Bank, 1991.
- _____, and E. Hanushek. "Improving Educational Efficiency in Developing Countries: What Do We Know?" Compare 18, no. 1: 21-36.
- _____, and Adriaan Verspoor. "Improving Primary Education in Developing Countries: A Review of Policy Options." Draft Prepared for the World Conference on Education for All, Jomtien, Thailand, March 5-9, Washington, D.C.: World Bank, 1990.
- _____, and Alastair Rodd. "Lending by the World Bank for Education Research." PRE Working Paper, no. 583, Washington, D. C.: World Bank, 1991.
- Middleton, John. "Management in World Bank Education Projects: Analysis of Experience." EDT Discussion Paper, no. 42, Washington, D.C.: World Bank, 1986.
- _____, James Terry, and Deborah Bloch. "Building Educational Evaluation Capacity in Developing Countries." PPR Working Paper, no. 140, Washington, D.C.: World Bank, 1989.
- Noor, Abdun. "Strengthening Education Management: A Review of World Bank Assistance, 1963-83." Washington, D.C.: World Bank, 1985.
- Paxman, B., C. Denning, and A. Read. "Analysis of Research on Textbook Availability and Quality in Developing Countries." PHREE/89/20, Washington, D.C.: World Bank, 1989.
- Romain, Ralph. "Lending in Primary Education: Bank Performance Review, 1962-83." EDT Discussion Paper, no. 20, Washington, D.C.: World Bank, 1985.

- _____, and Lenor Armstrong. "Review of World Bank Operations in Nonformal Education and Training." EDT Discussion Paper, no. 63, Washington, D.C.: World Bank, 1987.
- Searle, Barbara, ed. "Evaluation in World Bank Education Projects: Lessons from Three Case Studies." EDT Discussion Paper, no. 5, Washington, D.C.: World Bank, 1985.
- _____, "General Operational Review of Textbooks." EDT Discussion Paper, no. 1., Washington, D.C.: World Bank, 1985.
- World Bank. "1971 Sector Working Paper." Washington, D. C., 1971.
- _____. "1974 Sector Working Paper." Washington, D. C., 1974.
- _____. "Review of Bank Operations in the Education Sector." OED Report no. 2321, Washington, D. C., 1978.
- _____. "Education Sector Policy Paper." Report No. 2689, Washington, D. C., 1979.
- _____. "Education in Sub-Saharan Africa: Policies for Adjustment, Revitalization and Expansion." Washington, D.C., 1988.
- _____. "Annual Operational Review Fiscal 1988 Education and Training." PHREE/89/06R, Washington, D. C., 1989.
- _____. "The Dividends of Learning." Washington, D.C., 1990.
- _____. "Primary Education: A World Bank Policy Paper." Washington, D.C., 1990.
- Verspoor, Adriaan. "Accelerated Educational Development." PHREE/90/25, Washington, D.C.: World Bank, 1990.
- _____. "Implementing Educational Change: The World Bank Experience." EDT Discussion Paper, no. 44, Washington, D.C.: World Bank, 1989.
- _____. "Pathways to Change: Improving the Quality of Education in Developing Countries." PPR Discussion Paper, no. 53, Washington, D.C.: World Bank, 1989.
- _____. "Planning of Education: Where Do We Go?" mimeo, Washington, D.C., 1990.

PRE Working Paper Series

	<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS662	Trends in Social Indicators and Social Sector Financing	Jacques van der Gaag Elene Makonnen Pierre Englebert	May 1991	B. Rosa 33751
WPS663	Bank Holding Companies: A Better Structure for Conducting Universal Banking?	Samuel H. Talley	May 1991	Z. Seguis 37665
WPS664	Should Employee Participation Be Part of Privatization?	Barbara W. Lee	May 1991	G. Orraca-Tetteh 37646
WPS665	Microeconomic Distortions: Static Losses and their Effect on the Efficiency of Investment	Ramón López	May 1991	WDR Office 31393
WPS666	Agriculture and the Transition to the Market	Karen M. Brooks José Luis Guasch Avishay Braverman Csaba Csaki	May 1991	C. Spooner 30464
WPS667	VERs Under Imperfect Competition and Foreign Direct Investment: A Case Study of the U.S.-Japan Auto VER	Jaime de Melo David Tarr	May 1991	D. Ballantyne 337947
WPS668	Inflation Tax and Deficit Financing in Egypt	Hinh T. Dinh Marcelo Giugale	May 1991	L. Santano 80553
WPS669	Are High Real Interest Rates Bad for World Economic Growth	Nemat Shafik Jalaleddin Jalali	May 1991	M. Divino 33739
WPS670	Inflation Adjustments of Financial Statements: Application of International Accounting Standard 29	Yaaqov Goldschmidt Jacob Yaron	May 1991	G. Spooner 30464
WPS671	Lessons from the Heterodox Stabilization Programs	Miguel A. Kiguel Nissan Liviatan	May 1991	E. Khine 39361
WPS672	The Macroeconomics of Public Sector Deficits: The Case of Ghana	Roumeen Islam Deborah L. Wetzel	May 1991	R. Luz 34303
WPS673	The Macroeconomics of Public Sector Deficits: The Case of Pakistan	Nadeem U. Haque Peter Montiel	May 1991	R. Luz 34303
WPS674	Distributional Effects of Adjustment Policies: Simulations for Two Archetype Economies	Francois Bourguignon Jaime de Melo Akiko Suwa	May 1991	WDR Office 31393

PRE Working Paper Series

	<u>Title</u>	<u>Author</u>	<u>Date</u>	<u>Contact for paper</u>
WPS675	Are Buybacks Back? Menu-Driven Debt-Reduction Schemes with Heterogeneous Creditors	Ishac Diwan Mark M. Spiegel	May 1991	S. King-Watson 33730
WPS676	Higher Education in the Republic of Yemen: The University of Sana'a	Viswanathan Selvaratnam Omporn L. Regel	May 1991	C. Cristobal 33640
WPS677	On Economic Transformation in East-Central Europe: A Historical and International Perspective	Andres Solimano	May 1991	E. Khine 39361
WPS678	Economic Growth: A Review of the Theoretical and Empirical Literature	David Renelt	May 1991	R. Luz 34303
WPS679	Poverty Alleviation in Mexico	Santiago Levy	May 1991	M. Stroude 38831
WPS680	On Hunger and Public Action	Martin Ravallion	May 1991	C. Spooner 30464
WPS681	Political-Economy Arguments for Uniform Tariff	Arvind Panagariya Dani Rodrik	May 1991	K. Cabana 37947
WPS682	Intertemporal Substitution, Risk Aversion, and Private Savings in Mexico	Patricio Arrau Sweder van Wijnbergen	May 1991	S. King-Watson 31047
WPS683	Vocational Schooling, Occupational Matching, and Labor Market Earnings in Israel	Shoshana Neuman Adrian Ziderman	May 1991	C. Cristobal 33640
WPS684	The Value of Intra-household Survey Data for Age-based Nutritional Targeting	Lawrence Haddad Ravi Kanbur	May 1991	J. Sweeney 31021
WPS685	Children and Intra-household Inequality: A Theoretical Analysis	Ravi Kanbur	May 1991	J. Sweeney 31021
WPS686	Lending for Learning: Twenty Years of World Bank Support for Basic Education	Adriaan Verspoor	May 1991	C. Cristobal 33640